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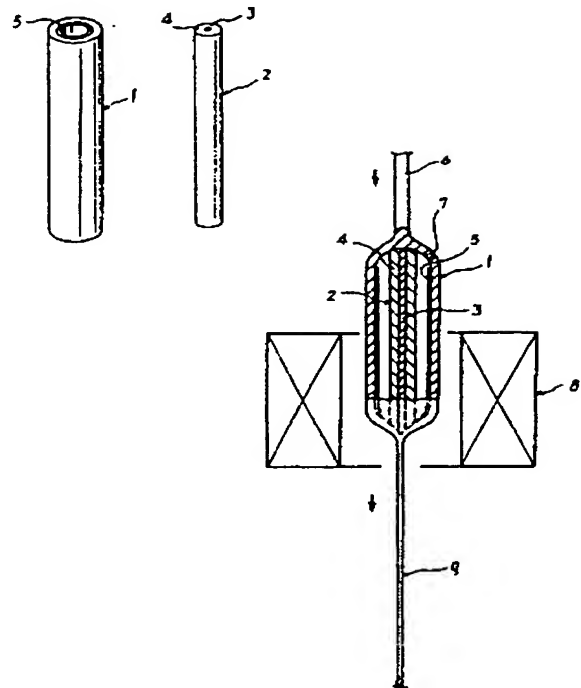
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TITLE : PRODUCTION OF DOPED QUARTZ  
OPTICAL FIBER



ABSTRACT : PURPOSE: To stably dope a very small amt. of a metallic component into an optical fiber by forming a doping layer contg. the metallic component on the inside of a quartz glass tube or the outside of a quartz glass rod, holding the rod in the tube, heating and drawing them.

CONSTITUTION: A doping layer 5 contg. a metallic component, e.g., a metal such as Li, Na, Rb, Mg, Sr, Ba or Al, a compd. thereof such as oxide, chloride, nitrate or carbonate or an organometallic compd. is formed by deposition on at least one of the inside of a quartz glass tube 1 for a jacket and the outside of a quartz glass rod 2 for the base material of an optical fiber consisting of a core part 3 and a cladding part 4. The rod 2 is then held in the tube 1, the upper end of the tube 1 is blocked and a support rod 6 is fitted to the blocked end. A venthole 7 for preventing bursting is pierced in the end and the tube 1 is slowly fed into a circular heating furnace 8 from the lower end, heated and drawn. The metallic component in the doping layer 5 is doped into a formed optical fiber 9 and the titled optical fiber 9 is obtd.

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